The Social and Economic Impact of New Technology 1978-84: A Select Bibliography

Compiled by: Lesley Grayson, B.Sc.(Econ); A.L.A.

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Lesley Grayson, B.Sc.(Econ); A.L.A.

Lesley Grayson qualified in Economics at London University and studied for her post-graduate Diploma in Librarianship at Ealing School of Librarianship. She joined the staff of the Greater London Council Research Library in 1973 and moved to the British Library Research and Development Department in 1976 to carry out investigative research into local government information. The publication resulting from her research 'Library and Information Services for Local Government in Great Britain' remains the definitive work on the subject.

Lesley Grayson now runs her own company 'Environmental Abstracts Services' in Chandlers Ford, Hampshire, UK.

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Introduction

Silicon chip technology; microprocessor technology; information technology; or quite simply new technology. These are some of the names representing the microelectronics revolution depending upon the audience being addressed by speaker or writer. No previous new industrial development has caused such widespread publicity and discussion amongst users and researchers as the new technology. Concern is being expressed about the effects of new technology on employment, job satisfaction, social life, leisure activities and the economics of commerce and industry. The late 70s saw many doom-laden predictions of those effects but by 1983 both management and trade unions were taking a more objective view of the social and economic impacts, and many correspondents now see the new technology as a means of opening up new industries and overcoming the effects of world recessions.

The "chip" has involved the factory floor, the office, the supermarket and the home. Electronic funds transfer, electronic shopping, microelectronic domestic appliances, word processors and microprocessor-controlled machinery mean that the new technology has pervaded all aspects of social and economic life, and the developed countries are now coming to accept it as part of society as a whole.

Inevitably the flood of literature on the social and economic impacts of new technology has been overwhelming. Unfortunately the quality of information and arguments propagated at conferences, in journal papers and research reports has indicated that there has been little quantifiable evidence available on the effects of these impacts. However, in the last two years, serious studies have been undertaken at international, national and regional levels to investigate the real effects of the new technology and the eye-catching and misleading titles ("chips with everything") of the late 70s are rapidly becoming a thing of the past. It appears that the time has come to treat the "silicon chip" as an accepted part of society and therefore its effect on our lives is to be seriously researched.

This wideranging bibliography brings together American, British and European literature on the social and economic effects on government, industry, business and the home. It covers national policies, cable television, data protection, effects on employment (in particular women's employment) effects on quality of life at work and in leisure time, and the changes which need to be made in education and training policies to meet the challenge the new technology brings. Of particular importance is the inclusion of a section on management as so much depends on the competent and sympathetic manager where new technology is being introduced into working practices in the office or on the factory floor. The views of the trade union movement are also represented as well as a consideration of health and safety aspects of the new technology.

A bibliography of some 700 references cannot hope to be comprehensive, but by careful sifting through thousands of references, the author hopes to have captured a significant and representative collection which will enable the manager, the research worker, the trade union negotiator or the operator to understand both the benefits and the dangers the new technology brings to both the working environment and to social life.

The emphasis throughout has been on economic and social impacts of new technology, and therefore the technical aspects of microelectronics have been ignored. The references have also been restricted to those which are easily obtainable from academic, special or public libraries, or through national library services such as the British Library.

Some deliberate duplication of references has occurred where books, reports or papers cover two or more separate issues in some detail. Duplication rather than cross-referencing was felt to be more beneficial to the user of the bibliography in these instances.